

REMARKS

Applicants' attorney thanks the Examiner for her comments. The specification has been amended at page 16, lines 4-14 to eliminate inconsistencies. Independent Claim 24 has been amended to indicate that the cellulose fibers are dry. Thus, when the absorbent article is dry (i.e., before the absorbent article is insulted with a liquid during use), the carboxylic acid odor control agent is both partially neutralized and bound to the cellulose fibers.

As explained on page 15, lines 10-12 of the specification, the primary focus of the invention involves combining the partially neutralized carboxylic acid odor control agent with the cellulose via a reaction and/or bonding which facilitates durable odor control (i.e., odor control that lasts over time and through multiple insults). As explained on pages 7 and 8, the odor control system is prepared by initially combining cellulose fibers, a carboxylic acid odor control agent, and a transition metal compound. The ingredients are blended in the water to facilitate partial neutralization of the odor control agent with the transition metal compound. The blend is then heated using a time and temperature sufficient to remove the water. The heating and drying of the blend causes the cellulose to react or otherwise bond to the partially neutralized carboxylic acid odor control agent, possibly according to the reaction described on page 8.

The resulting absorbent article possesses the following three useful properties which co-exist simultaneously:

1. The cellulose fibers are dry (i.e., the article has not yet been insulted with a liquid).
2. The carboxylic acid odor control agent is already partially neutralized, so as to alleviate rash and other side effects, prior to receipt of a liquid insult.
3. The odor control agent is bound to the cellulose fibers, so that it will not be washed away when a liquid insult occurs. This results in durable odor control properties.

Objection To The Information Disclosure Statement

Referring to page 2 of the Office Action, the objection to the Information Disclosure Statement is respectfully traversed. The Examiner refers to a "listing of references in the specification" which are not included on a separate form. The only prior art reference listed in the specification is U.S. Patent 4,273,786 to Kraskin. This reference is identified on the first page of PTO Form 1449 which was submitted with the First Information Disclosure Statement on 08 March 2002.

Applicants request entry of the nine pages of PTO Form 1449 submitted with the First Information Disclosure Statement, and the prior art listed on these

pages. Initialed copies of the nine pages of PTO Form 1449 were not attached to the Office Action. If the Examiner needs another copy of the First Information Disclosure Statement, please telephone the undersigned at (847) 490-1400.

Objection To The Drawings

Referring to pages 2 and 3 of the Office Action, the objection to the drawings is respectfully traversed. The undersigned carefully inspected Fig. 1, the only drawing, and found no error. The bodyside liner is properly identified as "20," the outer cover is properly identified as "30," and the fastening tapes are properly identified as "38." The absorbent core 25 is shown as having a central region 28 and two end regions 26.

The specification has been amended at page 16, lines 4-14, to correct inconsistencies between the specification and drawings. No new matter has been added. Fastening tapes 38 are already indicated at page 19, lines 9-10.

Claim Rejections Based On 35 U.S.C. §102(b)

On pages 3-5 of the Office Action, the Examiner rejected Claims 24-28, 30, 32-35, 39-40, 43-45 and 52-53 under 35 U.S.C. §102(b) as anticipated by European Publication 0,311,344 to Jordan et al. This rejection is respectfully traversed.

Jordan et al. discloses an absorbent article in which an odor control agent and an acidic buffering agent are separately added. There is no mixing of the two agents, and no partial neutralization of the odor control agent, before they are added to the absorbent article. There is no suggestion in the reference of an acidic buffering agent exchanging ions at any time with an odor control agent, to cause partial neutralization of the odor control agent. Assuming *arguendo* that such an interaction is possible in the absorbent article of Jordan et al., this type of interaction cannot occur until after the absorbent article has been insulted with a liquid. Until the absorbent article becomes wet, there can be no ionic exchange and no partial neutralization of an odor control agent.

As explained above, Applicants' independent Claim 24 requires three features to exist at the same time in the same absorbent article:

1. The cellulose fibers are dry,
2. The carboxylic acid odor control agent is partially neutralized,
and
3. The partially neutralized odor control agent is bound to the
cellulose fibers.

Jordan et al. does not disclose an absorbent article in which all three of these features exist at the same time. On page 5, lines 27-31, Jordan et al. discloses combining citric acid with a conjugate base. In the preceding paragraph (page 5,

lines 23-26), Jordan et al. acknowledges that proton release and other ionic exchange occur only in the presence of aqueous liquid. Thus, the citric acid will not interact with a base to cause partial neutralization unless there is an aqueous medium to facilitate ionic exchange. Jordan et al. does not disclose dry cellulose fibers co-existing with a partially neutralized carboxylic acid odor control agent that is bound to the fibers.

Jordan et al. further discloses high molecular weight polymeric acids useful as acidic buffering agents (p. 5, lines 33-53). These materials are partially neutralized, and are designed to swell when wet. Again, there is no disclosure of a partially neutralized carboxylic acid odor control agent bound to the cellulose fibers when the fibers are dry. Instead, such polymeric acids are added as separate particles, not bound to the dry fibers (see Example I, p. 11, lines 49-54 and Example V, p. 17, lines 23-28).

Jordan et al. describes another embodiment in which modified cellulose in the form of fibers has ion-exchanging, proton-donating capabilities (p. 5, line 54 – p. 6, line 7). In this embodiment, there is no odor control agent bound to the cellulose fibers. Furthermore, the modified cellulose fibers are in the “free acid” form when dry, and are not partially neutralized when dry (p. 5, line 55 - p. 6, line 13).

In another embodiment, described in Example IV of Jordan et al., a hot melt adipic acid may be applied to cellulose fibers, causing at least temporary binding

(p. 17, lines 1-10). In this embodiment, the acid is not partially neutralized when the cellulose fibers are in the dry state.

In summary, Jordan et al. does not disclose the combination of features existing together, required by Applicants' independent claims. Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §102(b).

Claim Rejections Based On 35 U.S.C. §103(a)

Referring to pages 5 and 6 of the Office Action, the Examiner rejected Claims 29, 31, 36-38, 41-42 and 49-51 under 35 U.S.C. §103(a) as obvious over European Publication 0,311,344 to Jordan et al. This rejection is respectfully traversed. As explained above, Jordan et al. does not disclose an absorbent article in which three features exist at the same time in the same absorbent article:

1. The cellulose fibers are dry,
2. The carboxylic acid odor control agent is partially neutralized,
and
3. The partially neutralized odor control agent is bound to the
cellulose fibers.

Applicants' specification describes a process which results in this product. Cellulose fibers are mixed with a carboxylic acid odor control agent and a transition metal compound (neutralizing agent). The mixing results in partial

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neutralization of the odor control agent. The mixture is then heated at an elevated temperature, for a time sufficient to cause drying, dehydration and bonding between the cellulose fibers and the partially neutralized odor control agent. The absorbent article is then produced using the dehydrated cellulose fibers bound to the partially neutralized odor control agent.

Jordan et al. does not disclose the claimed absorbent article, and does not disclose any process which would result in the claimed absorbent article. Applicants respectfully request withdrawal of this obviousness rejection.

Referring to page 6 of the Office Action, the Examiner rejected Claims 49-51 under 35 U.S.C. §103(a) as obvious over Jordan et al. in view of U.S. Patent 5,874,070 to Trinh et al. Trinh et al. discloses an aqueous odor absorbing composition (Abstract). Neither Trinh et al., nor any combination of Jordan et al. and Trinh et al., discloses an absorbent article having three features existing at the same time, in the same absorbent article:

1. The cellulose fibers are dry,
2. The carboxylic acid odor control agent is partially neutralized,
and
3. The partially neutralized odor control agent is bound to the
cellulose fibers.

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Accordingly, Applicants respectfully request withdrawal of this obviousness rejection.

Applicants believe that the claims are in condition for allowance. If the Examiner feels that any issues remain unresolved, then Applicants' attorney requests a telephone call from the Examiner, and a telephone interview.

Respectfully submitted,



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